



Remarks

The non-final Office Action dated August 7, 2001, has been reviewed, and respectfully submitted in response thereto are the above amendments to the specification and claims, the above new claims, and the following remarks. Claims 1 – 6 and 17 – 20 have been canceled without prejudice or disclaimer. Claims 7, 11, and 12 have been amended. New claims 21 – 24 have been added. Thus, claims 7 – 16 and 21 – 24 are currently pending in the application, and are respectfully submitted for reconsideration by the Examiner.

Applicants have amended the specification as indicated to include a description of features of the pin. Applicants respectfully assert that this amendment is supported by the specification and drawings as originally filed, by, for example, figure 2, and that no new matter has been added.

Claims 1 – 6 and 11 – 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,649,687 to *Rosas et al.* Claims 7 – 10 and 14 – 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Rosas et al.* in view of U.S. Patent No. 4,002,318 to *Koch*. Claims 17 – 20 were withdrawn from consideration. Applicants respectfully assert that these rejections are mooted for the reasons set forth in detail below.

As discussed above, claims 1 – 6 and 17 – 20 have been canceled without prejudice or disclaimer, and not for any reason related to the patentability of the claims over the references cited in the Office Action. With regard to currently pending claims 7 – 16, the dependency of these claims has been amended such that these claims depend from new independent claim 21. Applicants respectfully assert that the invention as a whole as recited in new claim 21 is not taught by the references cited in the Office Action.

Claim 21 is directed to a purge solenoid valve assembly that includes a pin. The pin includes first and second portions. The first portion is surrounded by a bobbin, and the second portion is capable of prohibiting flow through the assembly, wherein the first and second portions are adjacent each other and the first portion has a greater cross-sectional area than the second portion. Specifically, claim 21 recites “a pin having a first portion at least partially surrounded by the bobbin adjacent a second portion adapted for prohibiting flow through an aperture of a valve seat, the first portion having a cross-sectional area greater than a cross-sectional area of the second portion, the pin displaceable with respect to the bobbin when an electric current flows through the wire.” Applicants respectfully assert that these features of the

claim are supported by the originally filed specification and drawings, by, for example, figure 5. Applicants respectfully assert that the claimed invention as a whole is not taught by *Rosas et al.*

In contrast to the claimed features, *Rosas et al.* state that an armature 60 includes a portion surrounded by a solenoid assembly 44 as well as a portion that prohibits flow through an annular valve seat 22, but does not state that a first portion is surrounded by a bobbin adjacent to a second portion capable of prohibiting flow, wherein the first portion has a greater cross-sectional area than the second portion. For these reasons, Applicants respectfully submit that *Rosas et al.* do not teach the claimed invention as a whole, and therefore respectfully request allowance of new claim 21.

Further, *Koch* does not cure the deficiencies of *Rosas et al.* In contrast to the claimed features, *Koch* states that an armature support 13 includes a portion surrounded by an energizing coil 1 as well as a portion that prohibits flow through a flange 24, but does not state that a first portion is surrounded by a bobbin adjacent to a second portion capable of prohibiting flow, wherein the first portion has a greater cross-sectional area than the second portion. For these reasons, Applicants respectfully submit that *Koch* does not cure the deficiencies of *Rosas et al.*, and further does not individually teach the claimed invention as a whole. Thus, Applicants respectfully request allowance of new claim 21.

As discussed above, each of the remaining claims 7 – 16, as well as new claims 22 – 24, depend from independent claim 21, and are therefore also allowable for at least the same reasons as the independent claim, as well as for the recited features. Thus, Applicants respectfully request allowance of the dependent claims.

In view of the foregoing amendments and remarks, reconsideration of the application and timely allowance of the pending claims are respectfully requested.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the undersigned to expedite prosecution.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Attached hereto is a marked up version of the changes made by this amendment. The attached pages are captioned Version with Markings to Show Changes Made.

Respectfully submitted,

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Date: 7 November 2001

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Version with Amendments to Show Changes Made

IN THE SPECIFICATION:

Applicants have amended the specification to include the following paragraph on page 4, after the paragraph that ends on line 5.

As shown in figure 5, the pin can include a first portion that is at least partially surrounded by the bobbin 6, and can also include a second portion that can permit and prohibit flow through the aperture of the valve seat 13. The first and second portions can be adjacent to each other. In a preferred embodiment, the first portion has a cross-sectional area that is greater than a cross-sectional area of the second portion.

IN THE CLAIMS:

Applicants have canceled claims 1 – 6 and 17 – 20 without prejudice or disclaimer.

Applicants have amended claims 7, 11, and 12 as follows.

7. (Amended) The assembly according to claim [6] 21, further comprising:
[a pin displaceable with respect to the bobbin when an electric current flows through the wire; and]

a pin displacement calibration feature including a resilient element biasing the pin with respect to the overmolded cap and a first locator adjusting the position of the resilient element with respect to the overmolded cap.

11. (Amended) The assembly according to claim [6] 21, wherein the overmolded cap further includes a locking feature adapted for releasable retaining an electrical connector with respect to the connection body formation.

12. (Amended) The assembly according to claim [6] 21, wherein the overmolded cap further includes a snap fastening feature adapted for securing the overmolded cap to a mount.

Applicants have added new claims 21 – 24 as follows.

21. (New) A purge solenoid valve assembly having a valve driven by a solenoid, the assembly comprising:

- a bobbin;
- a wire wound around the bobbin;
- at least one terminal electrically connected to the wire; and
- an overmolded cap generally encapsulating the bobbin and the wire, the overmolded cap including a connector body formation partially encapsulating the at least one terminal; and
- a pin having a first portion at least partially surrounded by the bobbin adjacent a second portion adapted for prohibiting flow through an aperture of a valve seat, the first portion having a cross-sectional area greater than a cross-sectional area of the second portion, the pin displaceable with respect to the bobbin when an electric current flows through the wire.

22. (New) The assembly according to claim 21, further comprising:
a valve seat disposed at an outlet of the assembly, the valve seat including an aperture sized to receive the second portion of the pin to prohibit flow through the valve seat.

23. (New) The assembly according to claim 22, further comprising:
an elastomeric member disposed on the second portion of the pin, the elastomeric member effectively sealing the aperture of the valve seat to prohibit flow through the valve seat when the second portion is disposed in the aperture.

24. (New) The assembly according to claim 23, wherein the elastomeric member comprises an O-ring.